

NIAC Working Group on Cross Sector Interdependencies & Risk Assessment Guidance

Proposed Recommendations

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Mellon Financial Corporation

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Presentation Outline

- ☐ Background
- ☐ Report on Actions to Date
- ☐ Methodology
- ☐ Key Issues and Proposed Recommendations
- ☐ Next Steps

Background

- April 22 – NIAC Members recommend establishment of working group to:
 - Provide risk assessment guidance based on cross-sector interdependencies and gaps identified in the process.
 - Provide advice and guidance to the President on what needs to be addressed.

Report on Actions Taken to Date

- Project Initiation – May 8, 2003
 - Invitation sent to NIAC members
 - Invitation sent to Sector Coordinators
- Kick-off Meeting – May 14, 2003
- Progress Report –NIAC Meeting – July 22, 2003
- Deliver Proposed Recommendations – October 14, 2003

Methodology

- ❑ Formed Working Group comprised of representatives from NIAC member institutions and sector coordinators. The Working Group:
 - Met by conference call every week.
 - Reviewed existing interdependency studies.
 - Received briefings on the following:
 - ❑ DHS Homeland Security Operations Center
 - ❑ National Labs Modeling Capabilities
 - ❑ DHS Common Lexicon Project
 - ❑ InfraGard
 - ❑ Incident response plans from some critical infrastructures

Key Findings

- ❑ Cross-sector crisis management coordination is fundamental to the rapid restoration of critical infrastructure and integral to sustain the public's confidence in those infrastructures.
- ❑ We have identified nine issues and recommendations, that can help strengthen cross-sector crisis management coordination.

Fundamental Principles

- ❑ Projects must be structured to provide short-term deliverables to address the most pressing issues in a useful, if non-optimal, fashion.
- ❑ Progress must be monitored to ensure adequate progress is made towards implementing approved recommendations.
- ❑ Partnership between the public and private sectors must be a two-way street in order to evolve to a “trusted” partnership.

1. Inconsistencies exist in the definition of the critical infrastructures.

- Promote organizational consistency using the definitions for Critical Infrastructures contained in the National Strategy for Homeland Security.
- Each critical infrastructure should have:
 - Sector coordinator
 - Information sharing and analysis center (ISAC)
 - NIAC representation

ACTION ITEM: Critical Infrastructures

Sector	Sector Coordinator	ISAC	ISAC Contact	NIAC
1. Agriculture				
2. Food - Meat and Poultry - All Other		Food ISAC	Tim Hammonds Tim Weigner	
3. Water	Diane VanDe Hei - AMWA	Water ISAC	Susan Trampusch	American Waterworks Service Company, Inc.
4. Public Health	Tim Zoph - Northwestern Memorial Hospital	HC ISAC in development		
5. Emergency Services	Dave Christler			City of Albuquerque; City of New York
6. Government		NASCIO	Chris Dixon	
7. Defense Industrial Base				
8. Information and Telecommunications	Harris Miller - ITAA Matthew Flanigan - TIA Daniel Pyhthyon - USTA Kathryn Dondello - CTIA	IT ISAC Telecom ISAC	Peter Allor Ernie Gormsen Lt. Col. Francis Wentworth	Akamai Cisco E-Bay EDS Intel Inter-Con Security Systems Internet Security Systems Symantec V-One Corporation
9. Energy	Mike Gent - NERC Bobby Gillham - ConocoPhillips	Electric ISAC Energy ISAC	Lou Leffler Bobby Gilham	ConocoPhillips TXU Corp
10. Transportation	Ed Hamberger - AAR Greg Hull - ACI - NA David Plavin - APTA	Surface Transportation ISAC	Paul Wolfe	American Airlines
11. Banking & Finance	Rhonda MacLean - Bank of America	Financial Services ISAC	Suzanne Gorman	Mellon Financial Corp. NASDAQ Sterling Bank & Bancshares Wells Fargo & Company
12. Chemical Industry & Hazardous Materials		Chemical ISAC		DuPont Company Pfizer Global
13 Postal & Shipping				United Parcel Service
14. National Monuments and Icons Education (Not in National Strategy)				

2. The sector coordinator role is not broadly understood by private industry.

- We support the concept of sector coordinators who participate in, coordinate and support private/public and cross-sector collaborative efforts.
- Coordinator role should be defined and publicized to the CEOs, CIOs, and crisis managers of their sectors.

ACTION ITEMS: Sector Coordinators

- ❑ Modify the sector coordinator definition as follows:
 - ❑ Each “Critical Infrastructure” should have a consistently appointed and consistently funded sector coordinator.
 - ❑ The Sector Coordinators should be responsible to insure that a Crisis Management Plan exists for their sector.
 - ❑ The Sector Coordinators should also provide the “cross-sector” liaison role for their respective critical infrastructure.
- ❑ Appoint sector coordinators for critical infrastructures that currently do not have a coordinator.
- ❑ Create a communication plan to publicize the role of the sector coordinator to their constituents.

3. Crisis Management plans do not exist for each sector and are not tested end-to-end, across the sectors.

- ❑ Crisis Management Plans should exist for each sector and be tested.
- ❑ Testing should include cross-sector coordination.
- ❑ Testing and exercising sector crisis management plans should be under the purview of the sector coordinator.

ACTION ITEMS: Crisis Management Plans

□ Short-Term

- Create automated calling trees via an automated notification system.
- Each sector coordinator should establish a “Virtual Command Center” via an open bridge line to be used during a crisis.

□ Long-Term

- Develop crisis management plans for each sector
- Test annually and validate cross-sector coordination

4. A National Command Center does not exist as a confluence point for the private sectors during times of crisis.

- DHS should establish a virtual command center that provides a call tree, alerting mechanism, and communication point for use by critical sectors during an emergency situation.
- Each sector should have a seat at the Homeland Security Operations Center.

ACTION ITEMS: National Command Center

- ❑ Establish a virtual command center that provides a call tree, alerting mechanism, and communication point for use by critical sectors during an emergency situation.
- ❑ Assign each sector a seat at the Homeland Security Operations Center.

5. Government sponsored exercises (e.g., TOPOFF2) do not actively solicit private industry representation.

- DHS should sponsor crisis management exercises that include the participation of the critical infrastructures as soon as possible, and annually thereafter.
- Lessons learned from such exercises should be made available as appropriate and provided to the private sector.

ACTION ITEMS: Government Sponsored Exercises

- ❑ DHS devise and sponsor crisis management exercises.
- ❑ Extrapolate lessons learned from such exercises and distribute as appropriate.

6. There is an underestimation of the dependency of the Nation's critical infrastructures on the Internet.

- Enhance awareness of Internet dependencies, including:
 - Which products are dependent on the internet?
 - How much revenue would be lost if the above product(s) were not available?
 - What customer service products would be unavailable?
 - What internal processing supported applications would be broken?
 - What information/marketing tools would be impacted?

ACTION ITEMS: Internet Dependencies

- Private Industry:
 - Adopt security practices
 - Encourage users to keep skills and knowledge current
 - Help educate users
- Technology Vendors:
 - Design virus resistant-virus proof software
 - Reduce implementation errors
 - Ship products with high-security default configurations
- Government:
 - Provide incentives for higher quality software
 - Support a research agenda that seeks new approaches to software security
 - Encourage more technical specialists
 - Provide more awareness and training for internet users

7. Coordination in planning and response between public emergency management and private critical infrastructure is inadequate and/or inconsistent.
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- ☐ Provide a framework for public and private emergency management interaction at the national, sector, state, and regional levels.
- ☐ The framework should integrate with public and private information sharing models and account for Information Sharing and Analysis Centers and InfraGard.

ACTION ITEMS: Planning and Response Coordination

Short-term

- ☐ Review National Incident Management System to insure inclusion of private sector.
- ☐ Resolve any duplicative or competing objectives between InfraGard and DHS.
- ☐ Provide overview guide to critical infrastructure crisis management for private companies.

Long-term

- ☐ DHS should develop a national framework for information sharing and emergency management.
- ☐ Ensure above model includes a regional component.

8. There is a lack of incentives that would help defray the expense burden resulting from strengthening the resiliency of the critical infrastructures.
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- Consider forming a working group to explore the potential for creating tax incentives or other instruments to incent the private sector to enhance the resiliency of the critical infrastructures.

ACTION ITEMS: Lack of Incentives

- ☐ Form a working group to study this issue further.

9. Sophisticated modeling capabilities exist at the national laboratories and multiple research and development studies on cross-sector interdependencies have been completed.
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- ☐ The national labs should focus their interdependency modeling and research on the regions and sectors whose failure would have the greatest impact on the economy and national security.
 - ☐ The working group suggests modeling the telecommunications and energy sectors, and the interdependencies among them and the other critical infrastructures.
 - ☐ Existing research and development studies should be indexed and cross-referenced in such a way to make these materials accessible to appropriate parties.
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ACTION ITEMS: Modeling and Existing Research.

- Focus modeling efforts on most critical interdependencies, i.e., telecommunications and electricity sectors.
- Index and cross-reference existing research to avoid redundant efforts.

Sample Report Card

Issue #	Action Item(s)	Date Approved	Proposed Completion Date
1	Fill vacant roles in critical infrastructures	1/1/04	
2	Modify sector coordinator definition		
	Appoint sector coordinators		
	Create a communication plan		
3	Created automated calling trees		
	Establish sector virtual command centers		
	Develop crisis management plans		
	Test and validate plans annually		
4	Establish national virtual command center		
	Assign each sector a "seat" at HSOC		

Sample Report Card - *continued*

Issue #	Action Item(s)	Date Approved	Proposed Completion Date
5	Devise and sponsor cross-sector exercises		
	Extrapolate and distribute lessons learned		
6	Private Industry		
	Technology Vendors		
	Government		
7	Review NIMS for private sector inclusion		
	Resolve duplicative or competing efforts		
	Provide CIP guidance to private sector		
	Develop national framework for IS		
	Ensure a regional component in IS		

Sample Report Card - *continued*

Issue #	Action Item(s)	Date Approved	Proposed Completion Date
8	Form a working group to study incentives to strengthen CIP		
9	Focus modeling on telecommunications and electricity sectors		
	Index and cross-reference existing research		

Appendices

- ❑ Working Group Participants
- ❑ Deliverables Contained in Report of Proposed Recommendations

Working Group Participants

□ NIAC Member Institutions and DHS Support

- Susan Vismor, SVP, Mellon Financial Corp., Working Group Chair
- Teresa C. Lindsey, Chief of Staff, BITS
- Peter Allor - ISS
- Bob Bergman, UPS
- Andy Ellis - Akamai
- Bobby Gilham - Conoco Phillips (Also listed as sector coordinator)
- Rick Holmes - Union Pacific Corp.
- Douglas Hurt - V-One
- Aaron Meckler - Wells Fargo & Company
- Chris Terzich - Wells Fargo & Company
- Ken Watson - Cisco Systems, Inc.
- Nancy Wong, DHS
- Eric Werner, DHS
- Clay Woody, DHS

Working Group Participants

□ Sector Coordinators

- Kathryn Condello, CTIA, Telecommunications *
- Matthew Flanigan, TIA, Telecommunications*
 - David Thompson, TIA Online
- Michehl Gent, North American Electric Reliability Council, Electric Power *
 - Lou Leffler, NERC
 - Dave Nevius, NERC
- Bobby Gillham, ConocoPhillips, Inc., Oil and Gas *
- Ed Hamberger, Association of American Railroads, Surface Transportation*
 - Nancy Wilson, Association of American Railroads
- Rhonda MacLean, Bank of America, Financial Services *
 - Peggy Lipps, Bank of America
- Harris Miller, ITAA, Information*
 - Greg Garcia, ITAA
- Daniel Phythyon, USTA, Telecommunications*
 - David Kanupke, USTA
- Diane Van DeHei, Association of Metropolitan Water Agencies, Water *
- Tim Zoph, Northwestern Memorial Hospital, Healthcare

* *Accepted to participate to date (or send substitute).*

Deliverables

- ❑ Critical Infrastructures
 - Critical Infrastructures and Federal Liaison Organizations
 - Matrix of Roles Related to Critical Infrastructure Protection
 - Status of Current Information Sharing and Analysis Centers
- ❑ Sector Coordinators
 - Roles and Responsibilities Definition
- ❑ Crisis Management Coordination
 - Sector Call Trees
 - Sector Approaches to Security/Crisis Management
 - ❑ Railroad, Electricity, and Financial Services Sectors
- ❑ National Command Center Presentation Overview
- ❑ Government Sponsored Exercises
 - Blue Cascades' Key Findings

Deliverables (*continued*)

- ❑ Dependency on the Internet
 - Business Impact Survey Questions
 - Excerpts from Testimony of Richard D. Pethia, CERT
- ❑ Coordination in Planning
 - Business Incident Coordination System (Example)
 - National Crisis Management Partnership (Example)
- ❑ Lack of Incentives
 - Recommendation for a Future Working Group Study
- ❑ Research and Development and Modeling Capabilities
 - Matrix and abstracts of Reports on Critical Infrastructure Interdependencies
 - Ranking of Interdependencies by Critical Infrastructure Sector Representatives